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Electrical – Residential Lighting

The following information pertains to residential lighting. Items addressed are as follows:

- I. Where lighting is required,
- II. Outdoor lighting requirements, and
- III. Energy requirements relating to lighting

I. <u>Lighting is required in the following locations</u>:

In Dwelling Units

Wall switch controlled lighting outlets are required in the following eight locations:

- 1. In every habitable room
 - Note: Wall switch controlled receptacles are acceptable.
- 2. Bathrooms
- 3. Hallways
- 4. Stairways

<u>Note</u>: At interior stairways, there shall be a wall switch at each floor level to control the lighting outlet (3-way switch) where there are six or more steps.

- 5. Attached garages
- 6. Detached garages with electric power
- 7. At the exterior side of outdoor entrances or exits, and
- 8. At least one lighting outlet shall be provided in an attic, underfloor space, utility room and/or basement where these spaces are used for storage or contain equipment requiring servicing.

<u>Note</u>: The lighting outlet shall be controlled by a light switch located at the point of entry to the space (<u>Note</u>: Pull **chains are not allowed**)

Guest Rooms

• At least one wall switch-controlled lighting outlet or wall switch-controlled receptacle shall be installed in guestrooms in hotels, motels, or similar occupancies.

Miscellaneous Lighting Information -

- In habitable rooms, other than kitchens and bathrooms, one or more receptacles controlled by a wall switch shall be permitted in lieu of lighting outlets.
- In hallways, stairways, and at outdoor entrances, remote, central, or automatic control of lighting shall be permitted.
- Lighting outlets are allowed to be controlled by occupancy sensors that are:
- 1. In addition to wall switches, **or**
- 2. Located at a customary wall switch location and equipped with a manual override that will allow the sensor to function as a wall switch.

II. Outdoor lighting requirements are as follows:

Outdoor lighting requirements are as follows for residential projects:

1. At least one wall switch-controlled lighting outlet shall be installed at the exterior side of outdoor entrances or exits.

Note: A vehicle door in a garage shall not be considered as an outdoor entrance or exit.

- 2. Lighting outlets are allowed to be controlled by occupancy sensors that are:
 - In addition to wall switches, **or**
 - Located at a customary wall switch location and equipped with a manual override that will allow the sensor to function as a wall switch.
- 3. Low-pressure sodium (LPS) lighting by fully shielded fixtures is required for private roads and for large-scale parking lots. This is applicable for multi-family sites, such as, apartments and condominium complexes. For additional information regarding LPS fixtures, contact the Planning Division.

III. Energy regulations relating to residential lighting are required per the California Energy Commission and are enforced by the City of San Jose Building Division as follows:

1. **Energy Efficient lighting** is required when <u>new</u> lights are installed in a kitchen or bathroom. In the City of San Jose, either under-cabinet fluorescent lighting **or** recessed can-type fluorescent lighting **or** surface mounted fluorescent fixtures may satisfy this requirement as long as the lighting is adequate to provide <u>general</u> <u>illumination for the **entire** room</u>. Energy efficient lights should be well distributed throughout the room in order to meet the provisions of the code.

<u>Note</u>: One or two under-cabinet lights or recessed can lights may not provide sufficient illumination for a kitchen.

- 2. Fluorescent lighting is not required when **existing** incandescent fixtures are replaced. However, <u>fluorescent</u> <u>lighting is required</u> when **new** lights are added to existing kitchen and bathroom lighting if there are no existing fluorescent lights.
- 3. The fluorescent lighting requirement in a bathroom is satisfied as long as there is one fluorescent light in the vicinity of either the toilet area **or** the lavatory area **or** in the tub/shower area. As an alternative, **both** of the following are required:
 - I. A luminaire with 40 lumens/watt lamps must be installed in a laundry room, utility room or garage; and
 - II. All permanently mounted outside lighting must either be at least 40 lumens/watt or equipped with a motion sensor.
- 4. The fluorescent lighting requirement does not restrict the use of other types of lighting in conjunction with the required fluorescent lighting. When fluorescent lights and non-fluorescent lights are installed in the same area, they must be switched separately.
- 5. The required energy efficient lighting in kitchens and bathrooms must meet 40 lumens per watt efficiency or better. Fluorescent lighting, metal halide and high-pressure sodium satisfy the lumen requirement and are acceptable forms of lighting. However, only fluorescent lighting is typically available for indoor residential use.

 Note: Halogen lights, typically, have an efficiency of only 30 lumens per watt; therefore, they do not meet the minimum energy requirements.

Additional information can be obtained by visiting our website at www.sanjoseca.gov/building/ or by calling our Information Inspector's voice mail at (408) 535-3555 and leaving a detailed message. In addition you may visit the Building Division in City Hall at 200 East Santa Clara St. Our hours are 9:00 a.m. to 4:00 p.m. with limited service between 12:00 p.m. and 1:00 p.m.